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UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Electrification Administration  
Technical Standards Committees  
(Electric)

Supplement No. 1, October 1978, to  
REA Bulletin 43-5  
LIST OF MATERIALS ACCEPTABLE FOR USE ON  
SYSTEMS OR REA ELECTRIFICATION BORROWERS

The attached pages for the "List of Materials Acceptable for Use on Systems of REA Electrification Borrowers" are those which have been revised by action of the Technical Standards Committees during the months of July through September 1978. The following changes should be made in order to keep it up to date. Pages with a colon between are on the same sheet, both being changed.

<u>Add</u> <u>New Page</u>	<u>Remove</u> <u>July 1978 Page</u>	<u>Add</u> <u>New Page</u>	<u>Remove</u> <u>July 1978 Page</u>
a-1:a-2	a-1:a-2	ci	ci
k-1:k-2	k-1:k-2	cm	cm
k(3)	k(3)	cp	cp
l-1	l-1	cy-1	cy-1
l(1)	l(1)	cz	cz
m-1:m-2	m-1:m-2	du	du
u-1:u-2	u-1:u-2	ea(1):ea(2)	ea(1):ea(2)
u-3:v	u-3:v	eh	eh
w	w	ei:ej	ei:ej
z-1	z-1	sb-1	sb-1
z-2	z-2	sb-3	sb-3
z-4	z-4	zz-2	zz-2
z-6:z(Cond.)	z(Cond.)	U fz-1	U fz-1
aa,ab	-	U gc	U gc
ae-1	ae-1	U gn(3)	U gn(3)
an(3.2)	an(3.2)	U gp	U gp
an(5.1)	an(5.1)	U gu	U gu
at-1	at-1	U gv	U gv
at-2	at-2	U hb(2):U hb(2.1)	U hb(2):U hb(2.1)
bo	bo	U hp(1)	U hp(1)
br	br	U hp(3):U hp(4)	U hp(3):U hp(4)
bv	bv	U hq(1)	U hq(1)
cg-1	cg-1	U hv(1)	U hv(1)*
cg(2):cg(3)	cg(2):cg(3)	U ja(1)	U ja(1)

\*Incorrectly lettered as U hy(1) in the July 1978 issue.



a - Insulator, pin type

Specifications

5 kV - used on 2.4 kV and  
2.4/4.16 kV systems



ANSI Class 55-2	Plain	Radio- freed
Flashover, dry	50 kV	45 kV
Flashover, wet	25 kV	25 kV
Leakage distance	5 in.	5 in.
Pinhole diameter	1 in.	1 in.

Chance	C905-1302*
Gould Inc. (ITE)	8
**McGraw-Edison	NP8D8*
Ohio Brass	12847
Porcelain Products (Knox)	253

7.2/12.5 kV - used on 7.2/12.5  
and 7.62/13.2 kV systems



ANSI Class 55-3	Plain	Radio- freed
Flashover, dry	65 kV	55 kV
Flashover, wet,	35 kV	30 kV
Leakage distance	7 in.	7 in.
Pinhole diameter	1 in.	1 in.

Chance	C905-1303*
Gould Inc. (ITE)	5*
Joslyn (Pinco)	L63R*
McGraw-Edison	NP9D8*
Ohio Brass	38148*
Porcelain Products (Knox)	261-S*

15 kV - used on 7.2/12.5  
and 7.62/13.2 kV systems where  
greater insulation is needed



ANSI Class 55-4	Plain	Radio- freed
Flashover, dry	70 kV	65 kV
Flashover, wet	40 kV	35 kV
Leakage distance	9 in.	9 in.
Pinhole diameter	1 in.	1 in.

Chance	C905-1304*
Gould Inc. (ITE)	6*
Joslyn (Pinco)	L2064R*
McGraw-Edison	NP21D8*
Ohio Brass	38149*
Porcelain Products (Knox)	366-S*

\*Radio-freed

\*\*Available in white as indication of neutral. White insulators are non-radio-freed.

Radio-freed and non-radio-freed insulators made by these manufacturers and in these styles are acceptable.

NOTE: Post insulators (Item ea) may be substituted for the crossarm pin (Item f) and pin insulator (Item a) for both small and large conductor distribution drawings shown in REA Forms 803 and 804 at the option of the owner.

a-2  
October 1978

a - Insulator, pin type  
(Radio-freed)

Specifications

Used on 14.4/24.9 kV  
distribution lines.  
Radio noise free, metal  
thimble



ANSI Class 56-1  
Flashover, dry 95 kV  
Flashover, wet 60 kV  
Leakage distance 13 in.  
Pinhole diameter 1-3/8 in.

Chance	C906-1311
Gould Inc. (ITE)	127-R
Joslyn (Pinco)	L1123-R
Ohio Brass	38246-3010
Porcelain Products (Knox)	2027-S

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Used on 33 - 34.5 kV  
transmission lines.  
Metal thimble



ANSI Class 56-3  
Flashover, dry 125 kV  
Flashover, wet 80 kV  
Leakage distance 21 in.  
Pinhole diameter 1-3/8 in.

Chance	C906-1303
Gould Inc. (ITE)	245-R
Joslyn (Pinco)	L75-R
Ohio Brass	38223-3010
Porcelain Products (Knox)	2045-S

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Used on 44 - 46 kV  
transmission lines.  
Metal thimble



ANSI Class 56-4  
Flashover, dry-wet 140-95 kV  
Leakage distance 27 in.  
Pinhole diameter 1-3/8 in.

Gould Inc. (ITE)	255-R
Ohio Brass	38255-3010

NOTE: Post insulators (Item ea) may be substituted for the crossarm pin (Item f) and pin insulator (Item a) for both small and large conductor distribution drawings shown in REA Forms 803 and 804 at the option of the owner.



k - Insulators, suspension

ANSI Class Type	52-9 Clevis	52-1 Clevis	52-4 Clevis	52-3 Ball & Socket
Disc Diameter	4 $\frac{1}{4}$ "	6"	9" or 9 $\frac{1}{2}$ "	9" or 9 $\frac{1}{2}$ "
M & E Rating, lbs.	10,000	10,000	15,000	15,000
Leakage, inches	6-3/4	7	11 $\frac{1}{2}$	11 $\frac{1}{2}$
Flashover; kV: Dry-Wet	60 - 30	60 - 30	80 - 50	80 - 50
NOTES	(3)(4)(6)	(3)(4)	(5)	(2)

<u>Manufacturer</u>	<u>Catalog Number</u>			
Chance	C907-0209	C907-0001 (6)	-	-
Gould Inc. (ITE)	877	804 (6)	-	-
Joslyn (Pinco)	L1814	L1510	L-970	L-960
Lapp	6815-G70	6605	9100	9000
Locke	16044	16583	15S410	15S409
Ohio Brass	42399	32433	48019	48008
Porcelain Prod. (Knox)	20034	86012	-	-
Sediver	CT-4R2	-	-	-

Notes:

- (2) To be used only on transmission lines.
- (3) To be used only on distribution lines.
- (4) Use two insulators for 7.2/12.5 kV deadends and three insulators for 14.4/24.9 kV deadends.
- (5) Use two insulators for 14.4/24.9 kV deadends.
- (6) Either malleable iron, steel or aluminum hardware is acceptable.

k-2  
October 1978

k - Insulators, suspension

ANSI Class Type	52-3 Ball & Socket	52-4 Clevis	52-5 Ball & Socket	52-6 Clevis
Disc Diameter	10"	10"	10"	10"
M & E Rating, lbs.	15,000	15,000	25,000	25,000
Leakage, inches	11 $\frac{1}{2}$	11 $\frac{1}{2}$	11	11
Flashover; kV: Dry-Wet	80 - 50	80 - 50	80 - 50	80 - 50
NOTES	(2)	(1)	(2)	

Manufacturer

Catalog Number

Gould Inc. (ITE)	900	800	924	815
Joslyn (Pinco)	L1060	L1070	L1500	L1570
Lapp	8200	8100	5960G	2300
Locke	20S840	20S580	30S255	30S257
Ohio Brass	32440	32439	47410	47415
Porcelain Prod. (Knox)	81022	81012	-	-

Notes: (1) Use two for 14.4/24.9 kV deadends.  
(2) To be used only on transmission lines.





July 1978

## k - Insulator, suspension

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Sediver</u>		
10" suspension insulator	997(7/27/72)	To obtain experience.
CT-6R2 (clevis, 15,000 lbs.)	1068(6/26/75)	
N-6R2 (ball & socket, 15,000 lbs.)		
CT-12R (clevis, 25,000 lbs.)	997	
N-12R (ball & socket, 25,000 lbs.)	7/27/72	

Conditional List  
k(3)  
October 1978

k - Insulator, distribution deadend

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Permal</u>		
Distribution deadend	1019	For the purpose of gaining operating experience as follows:
RL-15 (15 kV line-to-line)	6/21/73	1. For distribution lines only.
RL-25 (25 kV line-to-line)	1045 7/11/74	2. To be used only in a horizontal position on deadends. Not to be used as vertical suspension insulators.
		3. Recommended maximum working load is 5,000 lbs.
		4. Not recommended for use in areas subject to contamination.
<u>Chance</u>		
Distribution deadend	965	Same as above
Catalog No. C654-G000	4/22/71	
"Epoxilator II"		
(15 kV line-to-line)		
Catalog No. C654-2500	1082	Same as above
"Epoxilator II"	1/22/76	
(25 kV line-to-line)	1129 12/15/77	
<u>Joslyn</u>		
Distribution deadend	1074	For the purpose of gaining operating experience as follows:
UDI 671-3002	9/25/75 1088 4/15/76	1. For distribution lines only, up to 15 kV line-to-line voltage.
Distribution deadend	1074	For the purpose of gaining operating experience as follows:
UDI 671-3010	9/25/75 1088 4/15/76	1. For distribution lines only, up to 25 kV line-to line voltage.

1-1  
October 1978

1 - Clamp, deadend

Copper 2 through 6 CWC 4A through 8A		DISTRIBUTION			
		ACSR			
		4/0 & 3/0	2/0	1/0	2 & 4
-	ALCOA	302**	302**	302**	302**
MD-52-N	Anderson/Sq. D	PG57N**	PG57**	PG-46N**	PG-46N**
-	Bethea/National	DA-20N**	DA-15-N**	DA-15-N**	DA-15-N**
2111	Joslyn (Brewer-Titchener)	5011 5210**	2116 -	2116 -	2107* 2115
-	C & R	CR-20-90-**	CR-10-90**	CR-10-90**	CR-10-90**
2111	Knox	5011 5210**	2116 -	2116 -	2107* 2115
20300C	Lapp	- 52552**	7511B 52550**	7511B 52550**	20300C 52550**
80500	Ohio Brass	80442 89237**	78500 86534**	88500 86534**	81500 86534**
-	Reliable	-	-	-	420*
-	Penn-Union	DQ2A-026**	DQ2A-026**	DQ2A-026**	-
1437	Gould Inc. (ITE)	5011 52101**	4060 1655	4060 2050	4060 2050

\*Clamp furnished with liner--does not require tape.

\*\*Aluminum clamp--does not require liner or tape.

1-2  
July 1978

1 - Deadend for steel strand (overhead ground wire)

TRANSMISSION

For high strength steel strand and aluminum-clad steel strand

<u>Manufacturer</u>	<u>Clamp Type</u>		
	<u>High strength steel</u>	<u>Aluminum-clad steel</u>	
	<u>3/8" and 7/16"</u>	<u>7 No. 9 AWG</u>	<u>7 No. 8 AWG 7 No. 7 AWG</u>
Ohio Brass	80437		

1 - Deadend for steel strand (overhead ground wire)

TRANSMISSION

For high strength steel strand and aluminum-clad steel strand

<u>Manufacturer</u>	<u>Compression Type</u>				
	<u>High strength steel</u>		<u>Aluminum-clad steel</u>		
	<u>3/8"</u>	<u>7/16"</u>	<u>7 No. 9 AWG</u>	<u>7 No. 8 AWG</u>	<u>7 No. 7 AWG</u>
Alcan Cable	82S712	82S714	82A79	82A78	82A77
ALCOA	4620.12	4627.14			
Burndy	YTW375E	YTW438E	YTW7M9T	YTW7M8T	YTW7M7T
Somerset	Order by wire size and type.				

Formed Type

Chance		16M AWSBG	20M AWSBG
Helical Line Prod.	HG523-12.5M	HG525-16M	HG528-20M
Preformed Line Products	AWDE-4119	AWDE-4122	AWDE-4125

Automatic Type

Reliable	5202	5202	5203
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Conditional List

1(1)

October 1978

1 - Clamp, deadend

DISTRIBUTION

2-Bolt Straight Line, Aluminum Alloy

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>*Barron Bethea</u>		
Aluminum alloy deadend	871	(a) To obtain experience.
Catalog No. SDF-10A	7/6/67	(b) Applications limited
(4 through 4/0 ACSR)		to replacements under
		hot line conditions.
<u>*Fargo</u>		
Aluminum alloy deadend	1137	Same as above.
Catalog No. GD-960A	4/20/78	
(With side opening	1144	
keeper order GD-961A)	8/3/78	
(No. 4 and No. 2 ACSR)	791	
Catalog No. GD-972A	4/30/64	
(2/0, 3/0, 4/0 ACSR)		
<u>*C &amp; R Products</u>		
Aluminum alloy deadend	918	Same as above.
Catalog No. CR-15-180	5/15/69	
(No. 2 and No. 4 ACSR)		
<u>*Bethea/National</u>		
Aluminum alloy deadend	961	Same as above.
Catalog No. ASO-684-2	2/18/71	
(1/0, 2/0, 3/0 ACSR)		
<u>*Anderson/Square D</u>		
Aluminum alloy deadend	1130	Same as above.
Catalog No. ADS-48-N	1/5/78	
(2/0 ACSR)		
Catalog No. ADS-60-N	1148	
(3/0 ACSR)	9/28/78	

\*Straight line deadend clamps are applicable for urban construction where tensions are moderate and on lines often worked hot.

m - Clamp, suspension

2 BOLT - DISTRIBUTION

	<u>Copper &amp; CWC</u>	<u>ACSR with 4</u>	<u>Straight or 2</u>	<u>Preformed 1/0 &amp; 2/0</u>	<u>Armor Rods* 3/0 &amp; 4/0</u>
Anderson	MS-46-N	MS-60-N	MS-70-N	HAS-85-N	HAS-104-N
Bethea/National	FS-46-N	GW-1-N	LS-0-N	LS-1-N	LS-2-N
Joslyn (Brewer-Titchener)	6240	6241	6242	6243	6244
C & R Products	-	-	-	CRSC-1	CRSC-2
Knox	6240A-U	6241A-U	6242A-U	6243A-U	6244A-U
Lapp	9300	9301	9302	9303	9304
Locke	46240A-U	46241A-U	46242A-U	46243A-U	46244A-U
Ohio Brass	83044	83064	83074	83084	83104
Preformed	-	-	-	-	AGS*
Gould Inc. (ITE)	6240	6241	6242	6243	6244
Barron Bethea	FGW-1	FGW-2	FGW-3	FGW-4	-

\*Accepted for larger sizes.

m-2  
October 1978

m - Clamp, Suspension

ANGLE - DISTRIBUTION  
No. 2 & 4 ACSR  
Plus Rods

2-BOIT TRANSMISSION  
For 3/8" Steel Overhead  
Ground Wire

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AAC-68-90	<u>Anderson</u>	MS-46-N
---	<u>Barron Bethea</u>	FGW-1
RALS-1	<u>Bethea/National</u>	FS-46-N
AC-75	<u>Continental</u>	FSC-46N
GD-907A	<u>Fargo</u>	-
2300	<u>Gould Inc. (ITE)</u>	6240
2300	<u>Joslyn (Brewer-Titchener)</u>	6240
2300	<u>Knox</u>	6240A-U
20920	<u>Lapp</u>	9300U
42300	<u>Locke</u>	46240A-U
82860	<u>Ohio Brass</u>	83044

u - Deadend for galvanized steel or  
alumoweld guy strand



3-Bolt Guy Clamp

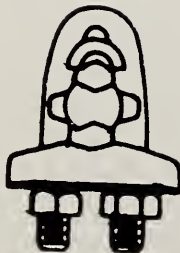
	Light (1/2" bolts)	Heavy (5/8" bolts)*
Chance	6450	6461
Dixie	D6450	D6461
Joslyn	J930	J931
Kortick	K4124	K4005
McGraw-Edison	DG3C2	DG3C3
Oliver	9002	9004
Util. Service	5273	5275

U-Bolt Guy Clamp

	Light (3/8" bolts)	Heavy (1/2" bolts)
Barron Bethea	GCU-38C	-
Continental	GC-64C	GC-67C
Flagg (MIF)	PAX-64C	PAX-67C

Offset Guy Clamp

	Light (1/2" bolts)	Heavy (5/8" bolts)
Chance	6409	6410
Joslyn	J926	J927
McGraw-Edison	DG5C1	DG5C2
Oliver	9056	9057



\*For use on transmission.

u-2  
October 1978

u - Deadend for galvanized steel guy strand

Strand Size:	1/4"	3/8"	7/16"
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Automatic

Reliable

Bail for thimble eye	5100	5102	5103
Bail for guy insulator	5150	5152	5153



Formed Type

Chance

For standard guy	1/4 GSBG	3/8 GSBG	7/16 GSBG
For wrapped guy	1/4 GSC	3/8 GSC	7/16 GSC

Helical Line Products

For standard guy	HG-207-1/4"	HG-210-3/8"	HG-211-7/16"
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Preformed Line Products

For standard guy	GDE-1104	GDE-1107	GDE-1108
For wrapped guy	WGL-2100	WGL-2103	WGL-2104





u - Deadend for alumoweld guy strand

Strand Size	7#12(6M)	7#11(8M)	7#10(10M)	7#9(12.5M)
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Formed Type  
Alumoweld Guy Strand

<u>Chance</u>				
For standard guy	6M-AWSBG	8M-AWSBG	10M-AWSBG	12.5M-AWSBG

<u>Helical Line Prod.</u>				
For standard guy	HG517-6M	HG519-8M	HG521-10M	HG523-12.5M

<u>Preformed Line Prod.</u>				
For standard guy	AWDE-4110		AWDE-4116	AWDE-4119
For wrapped guy	WGL-4110		WGL-4116	WGL-4120

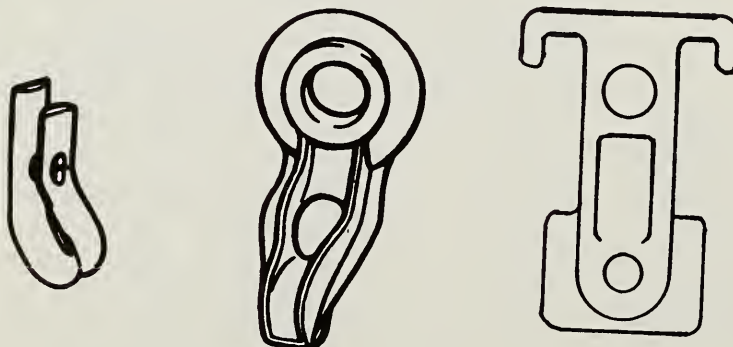
Automatic  
Alumoweld Guy Strand

<u>Reliable</u>	5200	5201	5202
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v  
October 1978

v - Guy attachment  
for 5/8" bolt

<u>Type:</u>	<u>Formed Strap</u>	<u>Angle Bolt Eye</u>	<u>Guy Hook</u>	<u>Pole Eye Plate</u>
<u>Maximum Working Load Rating</u>	23,130 N (5200 lbs.)	23, 130 N (5200 lbs.)	23,130 N (5200 lbs.)	37,800 N (8500 lbs.)
Anderson Elec./ Square D	-	-	-	GSP-05
Barron Bethea	-	-	GH-5*	-
Bethea/National	-	-	AG-5*	-
Chance	5004	0100	C203-0168*	-
Continental Elec.	-	-	GA-54*	PEP-66-45
Dixie	D5004	D0100	DD-9460, DD9462*	-
Flagg (MIF)	-	-	P135A, P157X*	PX88
Joslyn	J25164	J6500	J6555, J6556	-
Kortick	K4035, K4047	K3140	-	-
Lapp (Line Ware)	-	-	304014*	304021
McGraw-Edison	DG6H1	DG11E1	DG14H1*	-
Oliver	9083	7550	-	-
Power Line Hardware	-	-	GA-58C*	-
Util. Service	31030	5531	-	-



\*This hook may also be used in place of the wrapped guy arrangement in assemblies E3-2 and E3-3.

July 1978

v - Guy attachment

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
Joslyn		
Pole band, with cone head	745	To obtain experience.
bolt J-6281 and guy clip	8/16/62	For distribution line
J-6275		only and 10,000 lbs.
J-6280(for 6" to 10" pole)		maximum loading.
J-6270(for 8" to 14" pole)		

W  
October 1978

W - Insulators, guy strain  
(These items shall conform to "REA Specifications  
for Guy Strain Insulators," D-12)

Max. Strand Dia., inches	3/8	1/2	5/8	5/8
Ult. Strength, pounds	10,000	12,000	20,000	20,000
Flashover, kV, Dry-Wet	25-12	30-15	35-18	40-23
ANSI Class	54-1	54-2	54-3	54-4

<u>Chance</u>	C909-0041	C909-0042	C909-0043	C909-0044
<u>Gould Inc. (ITE)</u>	502	504	506	556
<u>Joslyn (Pinco)</u>	L502	L504	L506	L289
<u>Locke</u>	502	504	506	7666
<u>Ohio Brass</u>	31502	31504	31506	31352
<u>Porcelain Prod. (Knox)</u>	502	504	506	708

Insulators, guy strain  
(Fiber Glass)

Ult. Strength, pounds	11,000	15,000	21,000
<u>Anderson/ Sq. D</u>	GSI1	GSI2	GSI3
<u>Barron Bethea</u>	BB-11-CC Series	BB-15-CC Series	BB-21-CC Series
<u>Continental</u>	G-11 Series	G-15 Series	G-21 Series
<u>Dixie</u>	-	GIG-15 Series	GIG-25 Series
<u>Flagg (MTF)</u>	110 Series	150 Series	210 Series
<u>Joslyn-Empire</u>	400 Series	500 Series	650 Series
<u>Kearney</u>	-	322015	322021
<u>Plastigage</u>	HSI1-1P Series	HSI-2X Series	HSI3-1P Series
<u>Shakespeare</u>	-	692 Series	694 Series

y-4  
July 1978

y - Steel Strand

Aluminum Clad

Aluminum-clad steel strand for overhead  
ground wire (Alumoweld)

Applicable Specifications: ASTM B 416  
Applicable Sizes : 7 x .106", 7 No. 9 AWG,  
7 No. 8 AWG, 7 No. 7 AWG

Copperweld Steel Company

For guy strand (Alumoweld)

Applicable Sizes : 6M(7 No. 12), 8M(7 No. 11), 10M(7 No. 10),  
12.5M(7 No. 9)

Copperweld Steel Company



z - Anchors, Expanding and Plate

DISTRIBUTION

Rating - lbs.		6000	8000	10,000	12,000
Min. Area - sq. in.		90	100	120	135
Rod Dia. - inches		5/8	5/8	3/4	3/4
Rod Length - feet		7	7	8	-
	<u>Type</u>				
<u>Chance</u>	8 way	-	88115	88135	88135
	Plate	-	617	-	-
<u>Dixie</u>	4 way	D88100-G	D88115-G	D88135-G	D88135-G
	Plate	-	D7502-G	-	D7504-G
<u>Everstick</u>	3 way	834	836	8310	-
	4 way	-	-	84-3/4	-
<u>Grip-Tite</u>	8 way	A322086G	A322088G	A322812G	A322812G
<u>Joslyn</u>	8 way	J8100-G	J8115-G	J8135-G	J8135-G
	Plate	-	J7502-G	J7503-G	J7504-G
<u>McGraw-Edison</u>	4 way	DA1E5	DA1E6	DA1E6	DA1E7
	Plate	DA1P7	DA1P8	DA1P9	DA1P10
<u>Oliver</u>	8 way	-	G084115	G084135	G084135
<u>Power Line Hardware</u>	8 way	PLHG-1008	PLHG-1158	PLHG-1358	PLHG-1358
<u>South Central</u>	8 way	-	84115AG	84135AG	84135AG
<u>Utilities Service</u>	8 way	C88100-G	C88115-G	C88135-G	C88135-G
	Plate	-	C617-G	C622-G	C822-G

NOTE: Where galvanized anchors are listed, the same anchors ungalvanized (black asphalt coated) are also acceptable.

z-2  
October 1978

z - Anchors, plate

Applicable Specification: "REA Specification for Steel Plate Anchors," T-3

TRANSMISSION

Minimum Area 400 sq. in.

Chance

X24 - 3/4

Grip-Tite

XP24 - 3/4 - G

Joslyn

J3524 - 3/4 - G

McGraw-Edison

DA4P7 - 3/4 - G

Power Line Hardware

PLHG-24-3/4

NOTE: Where galvanized anchors are listed, the same anchors ungalvanized (black asphalt coated) are also acceptable.

z-3  
July 1978

z - Anchors, Cone

Holding Power in Hardpan and Rocky Soil	6000	8000	10,000
Min. Required Area	63	104	132
Rod Diameter - inches	5/8	5/8	3/4
Rod Length - feet	7	7	8

Dixie

D8C-G

D10C-G

D12C-G

NOTE: Where galvanized anchors are listed, the same anchors ungalvanized  
(black asphalt coated) are also acceptable.

z - Anchors, Service

Rated Holding Power in Sand - 2500 lb.

	<u>Screw</u>	<u>Expanding</u>
Chance	6346	6870
Dixie	D-6526	-
Grip-Tite	-	322065G
Joslyn	J6526W-CA	J0870-G
Oliver	8846	6870
Power Line Hardware	-	PLHG-70
Utilities Service	06346-G	PL62-2.5-G

z - Anchors, Swamp

DISTRIBUTION

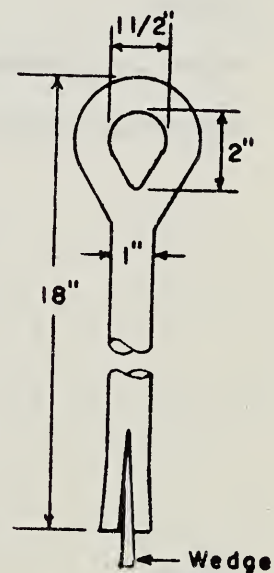
	<u>10" dia.</u>	<u>12" dia.</u>	<u>15" dia.</u>
Chance	10150AS	132AS	152AS
Joslyn	J2871SG	J2872SG	J2873SG
Oliver	110	112	115
Utilities Service	C10150A-G	C122A-G	C152A-G

NOTE: Where galvanized anchors are listed, the same anchors ungalvanized (black asphalt coated) are also acceptable.

z-5  
July 1978

z - Anchors, Rock

	Expanding Rock Anchors			Rock Guy Bolt
Anchor Size - inches	1-3/4	1-3/4	1-3/4	1-3/4
Rod Length - inches	15	30	53	18
Rod Diameter - inches	3/4	3/4	3/4	1
Chance	R315	R330	R353	-
Joslyn	J3436	J3437	J3438	J6547
Kortick	K5503	K5504	K5505	K2377
McGraw-Edison	-	-	-	DA1W1
Oliver	-	-	-	8932
Utilities Service	CR315	CR330	CR353	5003



z - Pole keys

Chance	P-4817
Joslyn	J-4817
Utilities Service	CP-4817



z - Anchors, Power-installed screw

Manufacturer:

A. B. Chance Company  
"SS" Multi Helix Anchors

Working Load Categories				
Soil Type	35,600 N (8,000 lb.)	53,400 N (12,000 lb.)	71,000 N (16,000 lb.)	89,000 N (20,000 lb.)
A <sub>1</sub>	12654-AE	12654-AE	12654-AEJ	12654-AEJ
Soil	12654-AEJ	12654-AEJ	12654-EJN	12654-EJN
Class 2	12654-EJN	12654-EJN	12654-EJNS	12654-EJNS
A <sub>2</sub>	12654-AE	12654-AE	12654-AEJ	12654-EJN
Soil	12654-AEJ	12654-AEJ	12654-EJN	12654-EJNS
Class 3	12654-EJN	12654-EJN	12654-EJNS	
B	12654-AE	12654-AEJ	12654-AEJ	12654-EJNS
Soil	12654-AEJ	12654-EJN	12654-EJN	
Classes 4 & 5	12654-EJN		12654-EJNS	
C	12654-AEJ	12654-EJN	12654-EJNS	
Soil	12654-EJN			
Classes 6 & 7				

Manufacturer:

Joslyn  
"PS" Screw Anchors

Working Load Categories				
Soil Type	35,600 N (8,000 lb.)	53,400 N (12,000 lb.)	71,000 N (16,000 lb.)	89,000 N (20,000 lb.)
A <sub>1</sub>	J24491ACA	J24491ACA	J25534ACAB	J25534ACAB
Soil	J23381ACA	J23381ACA	J25535ACAB	J25535ACAB
Class 2	J23383ACA	J23383ACA	J25533ACAB	J25533ACAB
A <sub>2</sub>	J24491ACA	J24491ACA	J23381ACA	J23383ACA
Soil	J23381ACA	J23381ACA	J23383ACA	J23384ACA
Class 3	J23383ACA	J23383ACA	J23384ACA	
B	J24491ACA	J23381ACA	J23381ACA	J23384ACA
Soil	J23381ACA	J23383ACA	J23383ACA	
Classes 4 & 5	J23383ACA		J23384ACA	
C	J23381ACA	J23383ACA	J23384ACA	
Soil	J23383ACA			
Classes 6 & 7				

- NOTES: 1. See REA Specification T-10 for definitions and explanations.
2. Anchors in the 53,400 N (12,000 lb.) category or above for use on wood poles must be used with hardware commensurate with the working load. Hardware may provide for either single or multiple guy attachments to the anchor.
3. Anchors listed in a specific working load category and/or soil class may generally be used at lower working load categories and/or lower numerical soil classes.

## Conditional List

z

October 1978

z - Anchors

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Chance</u>		
Screw anchors, power- installed		
11B1 (6,000 & 8,000 lb., 5/8" rod)	692 6/2/60	To obtain experience.
13C1 (10,000 & 12,000 lb., 3/4" rod)		
<u>Dixie</u>		
Screw anchors, power- installed	859 2/9/67	To obtain experience.
D-1162-G (6,000 & 8,000 lb., 5/8" rod)		
D-1375-G (10,000 & 12,000 lb., 3/4" rod)		
<u>Joslyn</u>		
Screw anchors, power- installed	973 8/19/71	To obtain experience.
J11b CA (6,000 & 8,000 lb., 5/8" rod)		
J13C CA (10,000 & 12,000 lb., 3/4" rod)		
<u>McGraw-Edison</u>		
Screw anchors, power- installed	992 5/25/72	To obtain experience.
D11G621 (6,000 & 8,000 lb., 5/8" rod)		
<u>Oliver</u>		
Screw anchors, power- installed	956 12/2/70	To obtain experience.
G-7896 (6,000 & 8,000 lb., 5/8" rod)		
G-7898 (10,000 & 12,000 lb., 3/4" rod)		

NOTE: Where galvanized anchors are listed, the same anchors ungalvanized (black asphalt coated) are also acceptable.

aa,ab  
July 1978

aa - Nut, eye  
ab - Nut, thimble eye  
5/8 inch

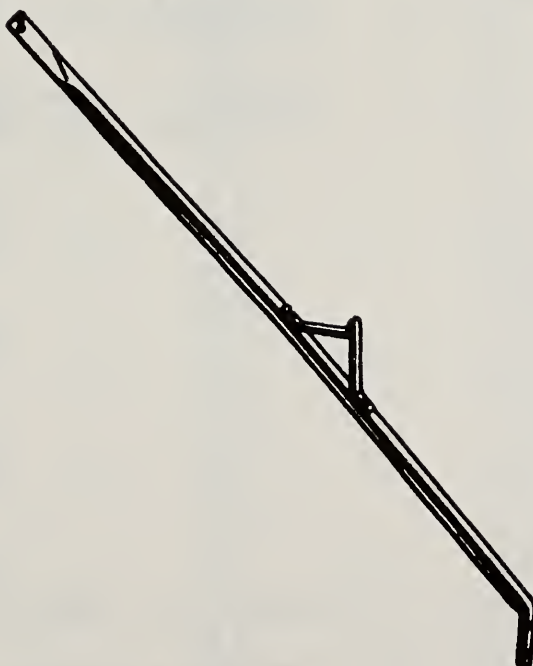
	<u>Eye Nut Conventional</u>	<u>Eye Nut Eyelet</u>	<u>Thimble Eye Nut</u>
			
Barron Bethea	OEN-2A	B-14A	EN-4A
Bethea/National	-	B-5	-
Chance	6502	-	6510
Continental Electric	EN-5	BE-5	TN-5
Dixie	D6502	DD-6517	D6510
Flagg (MIF)	P125C	P127A	P128A
Hughes	EN60	-	-
Joslyn	J1092	J1126	J6510
Kortick	K4212	K4413	K3111
Lapp (Line Ware)	304008	304006	304010
McGraw-Edison	DG2E3	DG6E1	DG1E1
Oliver	9460	9480	9440
Power Line Hardware	PLH-OE-1	PLH-BE-1	-
Utilities Service	450	497	C580



ac  
July 1978

ac - Brace, sidearm diagonal

	<u>1-1/2 inch angle</u> <u>3/16" x 5'</u>	<u>1-3/4 inch angle</u> <u>3/16" x 7'</u>
Chance	-	6984
Joslyn	J1521	J1525
Kortick	K1951	K1954
McGraw-Edison	DB1A1	DB1A5
Oliver	5171	5173
Utilities Service	5210	5212



ae-1  
October 1978

ae - Surge Arresters, Distribution  
(Lightning arresters)

<u>Manufacturer</u>	<u>Arrester Type</u>	<u>Mount- ing #</u>	Catalog No. of Arrester and Bracket		
			7.2/12 5	7.62/13.2	14.4/24.9
General Electric	Valve	T	9L24BAC	9L24BAD	9L24BAG
		C	9L24BAC	9L24BAD	9L24BAG
Joslyn	Valve	C	J9231-Q	J9231-Q	J9261-Q
		T	J9231-QT	J9231-QT	J9261-QT
Kearney	Valve	C	294012	294013	294016
		T	294042-7	294043-7	294046-7
		RS	294042-7	294043-7	294046-7
McGraw-Edison	Valve	T	AV500M010	AV500M010	AV500M018
		C	AV800M010	AV800M010	AV800M018
Ohio Brass	Valve	C	212203-7622	212203-7622	212206-7722
		R	212203-8006	212203-8006	212206-8007
		T	212203-8004	212203-8004	212206-8051
		RS	212203-8005	212203-8005	212206-8005
RTE	Expulsion	C	32-2686A03	-	32-2686A06
		T	32-2668A03	-	32-2668A06
Westinghouse	Valve	C	Type GLV 367A109A10	Type GLV 367A109A10	Type LVBB 369A104A18

#T - Transformer, C - Crossarm, R - Recloser, RS - Repair Shop

NOTE: Only arresters with top gaps and without ground lead disconnectors are acceptable.



an - Transformers, Power  
Three-Phase, Step-Down  
for Distribution Substation Use

Condition of Acceptance: To obtain experience.

Primary Voltage-kV	kVA						MVA							
	750	1000	1500	2000	2500	3750	5	7.5	10	12	15	20	25	30
Hevi-Duty														
34.4	S	S	X	S	S	X	X	X	S	S	X	S	S	S
43.8	S	S	S	S	S	X	X	X	X	X	S	S	S	S
67.0					S	X	X	X	X	X	S	X	S	S
115							X	X	X	X	S	S	S	S

Transformers 5 MVA and larger also accepted as load tap changing transformers using Westinghouse Types UTS-A and UTT-B and Siemens-Allis Type TLS load tap changers.

McGraw-Edison														
34.4	s		s								s	s	s	s
43.8	s		s								s	s	s	s
67.0	s		s								s	s	s	s

Transformers 5 MVA and larger also accepted as load tap changing transformers using McGraw-Edison Types 550, 550B and 550C load tap changers.

H. K. Porter														
(Delta-Star)														
34.4	s	s	s		s	X	X	X	s					
43.8			s	s	s	X	X	X	s	X				
67.0		s	X	s	X	X	X	X	X	X	X			
115							X	X	s					

Transformers 5 MVA and larger also accepted as load tap changing transformers using Siemens-Allis Types TLS and TIH-21 load tap changers.

an - Transformers, Power  
Three-Phase, Step-Down  
for Distribution Substation Use

Condition of Acceptance: To obtain experience.

Primary Voltage-kV	kVA						MVA					
	750	1000	1500	2000	2500	3750	5	7.5	10	12	15	20
RTE												
34.4			S	S	X	X	X					
43.8			X	S	S	X						

RTE-ASEA

34.4  
67.0  
115  
138

Transformers 5 MVA and larger also accepted as load tap changing transformers using RTE-ASEA  
Type UZD load tap changers.

Sierra (RSE)

34.4  
43.8  
67.0

Transformers 5 MVA and larger also accepted as load tap changing transformers using Westinghouse  
Types UTS-A and UTT-B load tap changers.

an - Transformers, Power  
Three-Phase, Step-Down  
for Distribution Substation Use

Condition of Acceptance: To obtain experience.

Primary Voltage-kV	kVA					MVA								
	750	1000	1500	2000	2500	3750	5	7.5	10	12	15	20	25	30
Standard														
34.4					X	S	X	S	S	S				
43.8					S	X	X	S	X					
67.0					X	X	S	X	S	S	X	S		
115			X											

Transformers 5 MVA and larger also accepted as load tap changing transformers using Westinghouse  
Types UTS-A and UTT-B load tap changers.

Wagner  
34.4  
43.8  
67.0  
115

S  
S  
S  
S

S

Westinghouse  
34.4  
43.8  
67.0  
115  
138

S  
S  
S  
S  
S

Transformers 5 MVA and larger also accepted as load tap changing transformers using Westinghouse  
Types UTS-A, UTT-B and UVW load tap changers.

Conditional List  
an(5.1)  
October 1978

an - Transformers, 2:1 Ratio, Single Phase,  
Autotransformers or Two-Winding Transformers  
for Use in System Voltage Conversion

All transformers are warranted by the manufacturer to withstand a short circuit of twenty-five (25) times rated current or to be self-protecting under short circuit (SP).

Condition of Acceptance: To obtain experience.

<u>Manufacturer</u>	<u>Designation</u>	<u>Size</u>
General Electric		
2-WND	HS STEP	167-500
AUTO	HS STEP	167-1000
Westinghouse		
2-WND	"Jumbo"	167-500
H. K. Porter (Delta-Star)		
2-WND	LTD	167-500
McGraw-Edison		
2-WND	MEPS-STEP	167-1000
AUTO	MEPS-AUTO	167-1000
Howard Industries		
2-WND	STEPS	167-500

NOTE: Two-winding transformers are self-protected under external short circuit in accordance with ANSI C57.12.90A. Auto-transformers will withstand 25 times rated current under external short circuit in accordance with ANSI C57.12.90A.

as  
July 1978

as - Clevis, service swinging

Applicable Specifications: "REA Specifications for Service Swinging  
Clevises," D-7

	<u>Clevis Only*</u>	<u>Clevis with Wet Process Spool</u>	<u>Clevis with Dry Process Spool</u>
Chance	1948C	1948C-C909-1031	1948C-0606
Dixie	D1938	D1938-C	D1948-C
Joslyn	J1614	-	J1615
Kortick	K9260	K9141	K9142
McGraw-Edison	DC7S2	-	-
Oliver	4461	4440	4441
Porcelain Prod.	-	-	1990-A
Utilities Serv.	32003	31003	31004

\*Catalog number does not include spool; for spool insulators see  
Item cm.

at-1  
October 1978

at - Guy Marker

8 Foot Length

Steel

<u>Manufacturer</u>	<u>Full Round</u>	<u>Half Round</u>
Chance	8180MB	-
Joslyn	J1618	J1528
Kortick	K3729	-
McGraw-Edison	DG6G2	DG5G3
Oliver	2818	808



at-2  
October 1978

at - Guy Marker

8 Foot Length

Plastic or Fiberglass

<u>Manufacturer</u>	<u>Catalog Number</u>
Chance	96-PBG-2 (Gray) 96-PBG-2Y (Yellow) 96-PBG-2GRN (Green) 96-PBG-2ORG (Orange)
*Electrical Materials	70-5 (Gray) 70-5Y (Yellow)
Joslyn	J1491Y (Yellow) J1491G (Gray)
Nordic	HGR-8 (Orange)
*Preformed Line Products	PG-5508 (Gray) PG-5518 (Yellow) PG-5528 (Green)
*Radar Engineers	6031 (Yellow)
*Virginia Plastics	TG-125-8G (Gray) TG-125-8Y (Yellow)
**Virginia Plastics	FG-8G (Gray) FG-8Y (Yellow)

\*For use with preformed or automatic type deadends for guy strand; will not fit over bolt type clamps.

\*\*Available with either 1 or 2 bolt clamps.

Conditional List  
at  
July 1978

at - Reflective Guy Marker (Guard)  
8-foot length  
Plastic or Fiberglass

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
* <u>Nordic</u> HG-815 yellow	1061 3/20/75	To obtain experience.

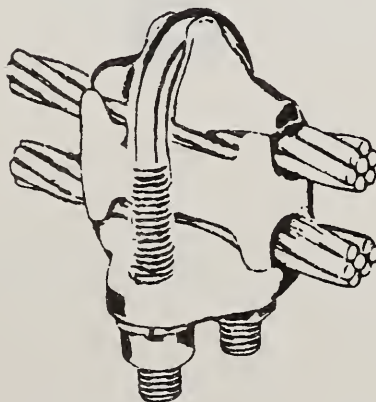
\*For use over preformed or automatic type deadends for guy strand; will not fit over bolt type guy clamps.

bn  
July 1978

bn - Clamp, loop deadend

For ACSR

	3/0	2/0	1/0	2	4
ALCOA	-	413	413	412	411
Anderson	LC-74B	LC-72B	LC-71-B	LC-70-B	LC-70B
Bethea/National	ALD-7373-U	ALD-34-U	ALD-1313-U	ALD-1313-U	ALD-1313-U
Blackburn	DLC23	DLC60	DLC61	DLC62	DLC62
Burndy	-	-	UW25R	UW2R	UW2R
C & R	-	-	CRLD-10	CRLD-10	CRLD-10
Fargo	GA-145	GA-145	GA-144	GA-144	GA-144
Joslyn	-	-	J1414	J1411	J1411
Penn Union	ADCL-040	ADC-11	ADC-10	ADCL-013	ADCL-C1
Weaver	-	-	WDE-10	WDE-2	WDE-2



bo  
October 1978

bo - Shackle, anchor

Anderson Elec./Square D	AS-25
Chance	5801
Dixie	D5801
Gould Inc. (ITE)	3022
Joslyn	J2742
Knox	3022
Kortick	K4481
Lapp	33852
Locke	43022
Ohio Brass	13722
Oliver	1435
Utilities Service	4106



br  
October 1978

br - End Link

<u>Manufacturer</u>	<u>Catalog Number</u>
Gould Inc. (ITE)	3082-HT
Joslyn (Brewer-Titchener)	BT-3082-HT
Knox	3082-HT
Lapp	6415-HT
Locke	43082-HT
Ohio Brass	79272

bs  
July 1978

bs - Bolt, single upset

Applicable Specifications: "REA Specifications for Single and  
Double Upset Spool Bolts," D-5

Diameter, inches	5/8	5/8	5/8	5/8
Length, inches	7	8	9	10
Chance	7740	7741	7741 $\frac{1}{2}$	7742
Dixie	D7740	D7741	D7741 $\frac{1}{2}$	D7742
Joslyn	-	J2342 $\frac{1}{2}$	J2343 $\frac{1}{2}$	J2344 $\frac{1}{2}$
Kortick	K4929	K4950	K4930	K4951
McGraw-Edison*	DC2E11	DC2E3	DC2E4	DC2E5
Oliver	7507	7508	7509	7510
Utilities Service	31052 $\frac{1}{2}$	31053	31053A	31054



\*Static proof designs available.



by  
October 1978

bv, Rods, armor

Aluminum or aluminum alloy rods for use on ACSR

ALCOA	Straight Formed Type
Blackburn	Formed Type
Chance	Formed Type
Helical Line Products	Formed Type
Preformed Line Products	Formed Type
Southwire	Straight

Copperweld rods for copper or CWC conductor

Helical Line Products	Formed Type
Preformed Line Products	Formed Type

Alumoweld rods for aluminum clad steel (Alumoweld)  
overhead ground wire

Chance	Formed Type
Helical Line Products	Formed Type
Preformed Line Products	Formed Type

Bronze rods (10 inch length) for jumper protection

Preformed Line Products	Formed Type
-------------------------	-------------

bx  
July 1978

bx - Splice, automatic

<u>Copper</u>	<u>Fargo</u>	<u>Reliable</u>
6	GL-111	61
4	GL-112	41
2 x 3	GL-115	-
1/0 x 7	GL-117	107
2/0 x 7	GL-118	207
3/0 x 7	GL-119	307
4/0 x 7	GL-120	407
<u>CWC</u>		
8A	GL-112	558A
6A	GL-113	556A
4A	GL-115	554A
2A	GL-117	
<u>ACSR</u>	GL-400 Series*	7650 Series*
<u>Aluminum Alloy</u> <u>(6201 and 5005)</u>	GL-100A Series GL-1000A Series	AL55 Series

\*For use on distribution only.

July 1978

bz - Switch, oil

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>McGraw-Edison</u>		
Capacitor oil switch	940	To obtain experience.
Type TSC, 38 kV max.	4/2/70	
100 ampere capacitor switch		
300 ampere load switch		
Oil switch with	1046	1. To obtain experience.
125 kV BIL accessory	7/25/74	
Type NR, 15 kV, single-		2. For use on single-
phase, remote electric		phase taps of
control, 200 amp. at		14.4/24/9 kV multi-
75 to 100 percent power		grounded wye systems.
factor.		

cg - Switch, air, three-pole, group-operated  
NEMA standard switches for station and line structures

<u>Manufacturer</u>	<u>Acceptable Mounting on Structure</u>	<u>Titling Ins.</u>		<u>Vertical Break</u>		<u>Side Break</u>		<u>Center Break</u>		<u>Double Break</u>	
		<u>Type</u>	<u>kV</u>	<u>Type</u>	<u>kV</u>	<u>Type</u>	<u>kV</u>	<u>Type</u>	<u>kV</u>	<u>Type</u>	<u>kV</u>
Gould Inc. ITE	Horizontal	3ST	15-34.5	TTR6	15-161						
Johnson	Horizontal			VIP	15-230	LS	15-69	M	15-230		
Joslyn (Hi-Voltage)	Horizontal			RF-2	15-230	RB-1(VL)	15-25				
	Horizontal					RB-1*	15-115				
Kearney	Horizontal	NE-2	15-34.5	AR 60-P	15-69						
MEMCO	Horizontal	AgF	15-69	EA	15-345						
	Horizontal	AgC	15-69								
H. K. Porter (Delta-Star)	Horizontal			MK-40	15-69	PMB-40A	15-69	LPC	69-230		
Siemens-Allis	Horizontal			TA	15-345	SSB	15-138	DSB	46-345		
								CBL	115-230		

(L) Means gas or solid material full-load interrupters are accepted and available.

(VL) Means vacuum full-load interrupters are accepted and available.

\* These switches may be purchased with reduced voltage vacuum interrupters and may be applied for loop sectionalizing duty when peak recovery voltage does not exceed 25 kV.

NOTE: Vertical phase-over-phase mounted switches are not acceptable above 25 kV class unless equipped with full-load interrupters. Switches of 15 kV and 25 kV classes with individual phases mounted on wood crossarms must be supplied with insulated interphase and control rods.

cg - Switch, air, three-pole, group-operated

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>H. K. Porter (cont'd.)</u>		
"Mark 40"		
115 kV thru 345 kV (horizontal upright mounting)	1005 12/7/72	To obtain experience.
Type LPV, 3-pole 72.5-272 kV, 1200 amp., 1600 amp., 2000 amp., center sidebreak for horizontal mounting	1064 5/1/75	To obtain experience.
<u>Siemens-Allis</u>		
Type AVB, 115-345 kV (horizontal upright mounting)	1027 10/11/73	To obtain experience.
Type CBL-T, 15-69 kV 600 and 1200 amp. (center break, horizontal upright mounting)	1100 10/21/76	1. To obtain experience. 2. Insulated interphase and control rods re- quired on 15 kV and 25 kV models used on wood structures.
<u>Morgan</u>		
Type VBV (VL), horizontal upright Pole top mtg., 15-34.5 kV H-frame mtg., 46-230 kV Substation mtg., 15-230 kV	1056 1/2/75 1146 8/31/78	1. To obtain experience. 2. Pole mounted switches must be supplied with insulated interphase and control rods. (Same as above.)
Type CVB, center side-break Horizontal pole top mounting, 15-34.5 kV Phase-over-phase mounting, 15-23 kV H-frame and substation mounting, 15-230 kV	1056 1/2/75	
<u>Chance</u>		
Type D2 (L)* side break, 15-34.5 kV, (horizontal and phase- over-phase mountings)	1074 9/25/75	1. To obtain experience. 2. "Duo-Gap" expulsion interrupter required with 34.5 kV switch on phase-over-phase mounting. 3. Not to be used in sub- stations.

(L) Full-load interrupter accepted and available.

\* Also available in bronze.

(VL) Means vacuum full load interrupters are accepted and available.



Conditional List  
cg(3)  
October 1978

cg - Switch, air, three-pole, group-operated

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Joslyn (Hi-Voltage)</u> Type RF-2 (VL), horizontal upright, vertical break, vacuum interrupter type air switch, 15-161 kV	867 5/25/67	To obtain experience.
<u>K-P-F</u> Type A202 (L) horizontal-mounted and Types A202 (L), W202 (L) and MD202 (L) phase-over-phase mounted with quick break loadbreak device.	1137 4/20/78	1. To obtain experience. 2. For 15 kV distribution lines only. 3. Insulated interphase and control rods required.

(L) Means full-load interrupter accepted and available.

(VL) Means vacuum full-load interrupters are accepted and available.



ci  
October 1978

ci - Clevis, thimble, side-opening

Numbers listed will accommodate: No. 6 thru 2/0 Copper  
No. 8A thru 2A Copperweld-Copper  
No. 4 thru 3/0 ACSR

<u>Gould Inc. (ITE)</u>	2400
<u>Joslyn (Brewer-Titchener)</u>	2401
<u>Knox</u>	2401
<u>Lapp</u>	97826
<u>Locke</u>	42400
<u>McGraw-Edison</u>	DM5C1
<u>Ohio Brass</u>	82825

cj  
July 1978

cj - Pole Ground Wire

Soft annealed iron, BB Grade, Class C galvanizing  
(For pole protection only)

<u>Manufacturer</u>	<u>Size</u> 1.15 Ohms/1000 ft., max.
Bethlehem Steel	3-wire, 5/16 inch
Indiana Steel and Wire	3-wire, 5/16 inch
Southwire	3-wire, 5/16 inch
U. S. Steel	3-wire, 5/16 inch

Copper, soft annealed solid  
ASTM Specification B3

Manufacturer

(See page av-2)

Aluminum (for above ground use only)  
Three-quarter hard-drawn EC grade

Manufacturer

(See page av-1)

Aluminum Alloy (for above ground use only)

<u>Manufacturer</u>	<u>Type</u>
ALCAN	6201
ALCOA	6201
American Electrical	6201
Kaiser	6201
Reynolds	5005
Southwire	6201, 5005

Copper-Clad Steel, Annealed 40 Percent Conductivity  
(For pole protection on transmission line only, REA  
Drawing TM-9)

<u>Manufacturer</u>	<u>Size (AWG)</u>
Copperweld	No. 6

ck  
July 1978

ck - Clamp, anchor rod bonding

For Standard and Drive Type Rods

<u>Diam. of Rod</u>	<u>Type of Eye</u>	<u>5/8"</u>	<u>3/4"</u>	<u>1"</u>
C & R Products	Single	CRBC-1	CRBC-1	CRBC-1
	Twin	CRBC-2	CRBC-2	CRBC-2
	Triple	-	CRBC-3	CRBC-3
Chance	Single	G5060	G5060	G5060
	Twin	G5061	G5061	G5061
	Triple	-	G5063	G5063
Dixie	Single	D3143	D3143	D3143
	Twin	-	D3144	D3144
	Triple	-	D3145	D3145
Joslyn	Single	3230	3230	3230
	Twin	-	3231	3231
	Triple	-	3233	3233
Kortick	Single	K3147	K3147	-
	Twin	-	K3148	K3148
	Triple	-	K3149	K3149
McGraw-Edison	Single	DA1B1	DA1B1	DA1B1
	Twin	DA2B1	DA2B1	DA2B1
Oliver	Single	9123	9123	9123
	Twin	-	9122	9122
Utilities Serv.	Single	CG5060	CG5060	-
	Twin	-	CG5061	CG5061
	Triple	-	CG5063	CG5063

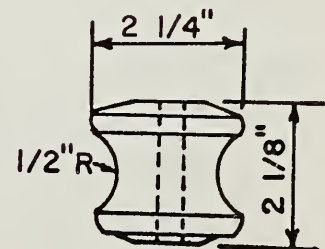
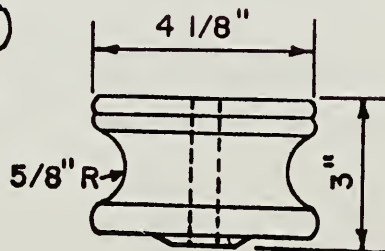
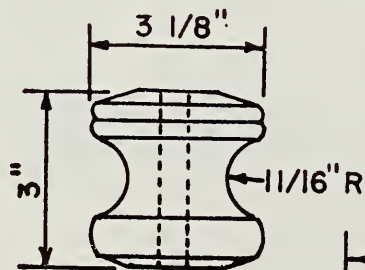
For Power Installed Screw Anchors

C & R Products	Single	CRBC-4	CRBC-5	-
Chance	Single	G5067	G5068	-
Joslyn	Single	PIBC-4	PIBC-5	-

cm  
October 1978

cm - Insulator, spool

Type:	<u>Secondary (Wet Process)</u>		<u>Service</u>	
			<u>Wet Process</u>	<u>Dry Process</u>
Groove Diameter:	<u>1-3/4"</u>	<u>3"</u>	<u>1-3/8"</u>	<u>1-3/8"</u>
Chance	C909-0032	C909-0034	C909-0031	0606
Hughes	2102	-	-	-
Gould Inc. (ITE)	2012	2026	2011	-
Joslyn	J151	J0101	J150	J100
Kortick	K516	K522	K513	K514
McGraw-Edison	DE4S3	DE5S1	DE2S2	DE2S1
Oliver	2100	2104	2400	2300
Porcelain Prod. (Knox)	310	306	303W	300D
Universal	1082	-	-	-
Utilities Service	205	31221	208	207



cp - Deadend, compression type

ACSR

<u>Conductor Size</u>	<u>Alcan</u>	<u>ALCOA</u>	<u>Anderson/Sq. D</u>	<u>Burndy</u>
1/0		Order by	VCD-50R	Type Y-W
2/0		Conductor	thru	"
3/0		Size and	VCD-61R	"
4/0		Stranding	"	"
266.8 kcmil 26/7	SEDA-1109	2-piece		"
336.4 kcmil 26/7	thru	alloy		"
477 kcmil 26/7	SEDA-2209	compression		"
556.5 kcmil 26/7	"	"		"
795 kcmil 26/7		"	VCD-835-4RM	
954 kcmil 54/7		"	VCD-835-4RM	

<u>Conductor Size</u>	<u>Kearney</u>	<u>Somerset/Homac</u>
1/0	104000	Order by
2/0	thru	Conductor
3/0	104000-03	Size and
4/0	"	Stranding
266.8 kcmil 26/7	104000-05	"
336.4 kcmil 26/7	thru	"
477 kcmil 26/7	104000-14	"
556.5 kcmil 26/7	"	"
795 kcmil 26/7		
954 kcmil 54/7		

ACSR

Adjustable

Somerset/Homac

Order by conductor size and stranding.

Aluminum Alloy  
(6201 and 5005)

Conductor Size: 4 thru 4/0

Anderson/Sq. D Type VCD, Order by conductor size.

Copper

<u>Conductor Size:</u>	<u>2 x 3</u>	<u>4</u>	<u>6</u>
National Tel. Supply	71-258/3X	71-204-P	71-162-J

Copperweld-Copper

<u>Conductor Size:</u>	<u>6A</u>	<u>8A</u>
National Tel. Supply	71-6A-P	71-8A-P

Conditional List  
cp  
July 1978

cp - Deadend, compression type

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Burndy</u>		
AWAC 4-4/3	1050	To obtain experience.
YTW7M10T	9/19/74	
AWAC 2-4/3		
YTW7M9T		
AWAC 1/0-4/3		
YTW7M7T		



cy - Splice, compression  
ACSR

<u>Conductor Size</u>	<u>Alcan</u>	<u>Alcoa</u>	<u>Anderson/ Sq. D</u>	<u>Burndy</u>	<u>ITT Blackburn</u>
4 6/1		2-piece	VC-36R	"Unisplice"	Type RC
4 7/1		Order	VC-36R	(1-piece)	1-piece
2 6/1		by	VC-36R	or Y-S	Order
2 7/1		Conductor	VC-36R	(2-piece)	by
1/0		Size	VC-50R	Order by	Conductor
2/0		and	VC-50R	Conductor	Size
3/0		Stranding	VC-61R	Size and	and
4/0		"	VC-61R	Stranding	Stranding
266.8 kcmil 26/7	TJA-1109	2-piece		2-pc.	Type DT
336.4 kcmil 26/7	TJA-1309	Compression		"	2-piece
477 kcmil 26/7	TJA-1809	Alloy Order		"	for
556.5 kcmil 26/7	TJA-2209	by Conductor		"	kcmil sizes
795 kcmil 26/7		Size and	VC-835-4RM		
954 kcmil 54/7		Stranding	VC-835-4RM		

<u>Conductor Size</u>	<u>Kearney</u>	<u>Nat. Tel. Supply</u>	<u>Somerset/ Homac</u>	<u>Penn- Union</u>
4 6/1	OH4-61A	"Nicopress"	"Tension	Type KFAS
4 7/1	OH4-71A	(1-pc. or 2-pc.)	splicer"	(1-piece)
2 6/1	OH2-61A	Order by Conduc-	(1-piece or	Order
2 7/1	OH2-71A	tor Size and	2-piece)	by
1/0	OH1/0-61A	Stranding	Order by	Conductor
2/0	OHR2/0-61A	2-pc.	Conductor	Size
3/0	OHR3/0-61A	"	Size and	and
4/0	HR4/0-61A	"	Stranding	Stranding
266.8 kcmil 26/7	HR-266-267A	"	2-pc.	
336.4 kcmil 26/7	HR-336-267A	"	"	
477 kcmil 26/7	HR-477-267A	"	"	
556.5 kcmil 26/7	HR-556-267A	"	"	

Copper and Copperweld-Copper

<u>Conductor Size</u>	<u>Anderson</u>	<u>Burndy</u>	<u>Kearney</u>	<u>Nat. Tel. Supply</u>	<u>Reliable</u>	<u>Somerset/ Homac</u>	<u>Penn- Union</u>
6 cu	Vcc-28	YDS6W	OH6C	1-162/J	6-J-1	J2C3	BFW
4 cu	VCC-28	YDS4W	OH4C	1-204/P	4-P-1	L2C5	BFW
2 x 3 cu	-	YDS2C-3	OH2-3CX	1-258/3X	2/3STR-X1	S2C7	-
0 x 7 cu	-	YDS25	OH1-7C	1-325/7F6	-	U2C9	BF
8A CWC	VCC-28	YDS8KT	OHR8ACW	1-8A-P	8A-P-1	L2E1	-
6A CWC	VCC-28	YDS6KT	OHR6ACW	1-6A-P	6A-P-1	L2E3	-
4A CWC	VCC-37	YDS4KT	OHR4ACW	1-4A-X	4A-X-1	Q2E5	-
2A CWC	VCC-43	-	-	-	-	U2E7	-

cy-2  
July 1978

cy - Splice, compression  
(one-piece)

(For 6201 and 5005 Aluminum Alloy Conductors)

<u>Conductor Size</u>	<u>Anderson</u>	<u>Burndy</u>	<u>ITT Blackburn</u>
#4 thru 4/0	Type VC-R Order by Conductor Size and Stranding	"Unisplice" Order by Conductor Size and Stranding	Type RC Order by Conductor Size and Stranding

<u>Conductor Size</u>	<u>Penn-Union</u>	<u>Somerset/Homac</u>
#4 thru 4/0	Type KFAS Order by Conductor Size and Stranding	"Tension Splicer" Order by Conductor Size and Stranding

Conditional List  
cy  
July 1978

cy - Splice, compression

1-piece splice for ACSR

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>*ALCOA</u> "Jiffy Joint"	704 11/10/60	To obtain experience.

1-piece splice for AWAC

<u>Burndy</u> AWAC 4-4/3 YDS7M10T AWAC 2-4/3 YDS7M9T AWAC 1/0-4/3 YDS7M7T	1050 9/19/74	To obtain experience.
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\*Satisfactory for use with 6201 and 5005 all aluminum alloy conductor through 4/0 and 19 strand conductors of sizes 26,800 CM and 477,000 CM.

CZ  
October 1978

cz - Splice for Steel Strand (Overhead Ground Wire)

Compression

Single Sleeve Only

	<u>High strength steel</u>		<u>Aluminum clad steel</u>		
	<u>3/8"</u>	<u>7/16"</u>	<u>7 No. 9 AWG</u>	<u>7 No. 8 AWG</u>	<u>7 No. 7 AWG</u>
Alcan Cable	81390	81468	81375	81421	81468
Alcoa	4012.377	4014.453			
Burndy	YTS375E	YTS438E	YDS7M9T	YDS7M8T	YDS7M7T
Kearney	HR-3/8-3-7S				
National Tel. Supply	5-7/120G92	5-7/145J22			
Somerset/Homac	29714				

Steel and Aluminum Sleeves

Alcoa	4720.12	4727.14
Somerset/Homac	29714 & 28414 (Two piece)	

Automatic

Reliable	5002	5003	5066	5066	5068
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Bolted Type

Electroline	GD-537
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Formed Type

Preformed Line Products	GLS-2107	GLS-2108	AWLS-4119	AWLS-4122	AWLS-4125
Helical Line Products	HS-310-3/8"	HS-311-7/16"			

du  
October 1978

du - Link, extension

Transmission

<u>Manufacturer</u>	<u>Catalog No.</u>
Gould Inc. (ITE)	3074A
Joslyn (Bolted) (High Strength)	J7712 J22609
Knox	3074A
Locke	43074A
Oliver	1491

Guy Extension Link  
(For "H" Structure)

<u>Manufacturer</u>	<u>One Guy Attachment</u>	<u>Two Guy Attachment</u>
Joslyn	J22421	J22523

dv  
July 1978

dv - Thimble, aluminum

May be used in place of armor tape for ACSR deadends on 3-inch groove diameter spools or thimble clevises.

Manufacturer

Dixie

Catalog No.

D-6647



## Conditional List

ea(1)

October 1978

ea - Insulator, post type

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
Gould Inc. (ITE)		
2220 (7.2/12.5 kV)	932	To obtain experience.
2227 (14.4/24.9 kV)	12/4/69	
2335 (22 kV)		
2345 (33 kV)		

Conditional List  
ea(2)  
October 1978

ea - Insulators, horizontal post type

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
Gould Inc. (ITE) 2845-41 (34.5 kV)	1011 3/1/73	1. To obtain experience  2. For use only on wood poles in scenic or urban areas where right-of-way is limited.
Lapp F-4745 (34.5 kV) F-4788 (69 kV) F-70147 (115 kV)	997 7/27/72	Same as above
Ohio Brass 43740 (34.5 kV) 43790 (69 kV) 47043 (115 kV)	999 8/31/72 1105 1/6/77	Same as above

eg  
July 1978

eg - Plate, crossarm reinforcing

TRANSMISSION

For 5-5/8" x 7-3/8" crossarm

<u>Manufacturer</u>	<u>Catalog No.</u>
Chance	4047
Hughes	1113.88
Joslyn	J22672.6
McGraw-Edison	DG16M9
Oliver	1827
Utilities Services	3838

eh  
October 1978

eh - Hook, ball

<u>Manufacturer</u>	<u>Catalog No.</u>
Anderson Elec./Square D	HB-30
Bethea/National	BH-5
Gould Inc. (ITE)	3001
Joslyn (Brewer-Titchener)	3001-HT
Knox	3001
Lapp	7055
Locke	43001
Ohio Brass	78420

ei - Clamps, suspension with socket eye

ACSR with Straight or Formed Armor Rods

AWG	1/0 & 2/0	3/0	4/0	266.8	336.4	477	556.5	795	954

Iron or Steel Clamps

MS-82-S	-	MS-104-S	MS-104-S	-	-	-	-	-	-
FGW-4S	-	-	-	-	-	-	-	-	-
FS-83-S	-	-	-	-	-	-	-	-	-
6203	6204	6204	6204	6205	6255	6257	-	-	-
6203	6204	6204	6204	6205	6255	6257	-	-	-
6203A-U	6204A-U	6204A-U	6204A-U	6205A-U	6255A-U	6257A-U	-	-	-
9203	9204	9204	9204	9205	9205A	9207A	-	-	-
46203A-U	46204A-U	46204A-U	46204A-U	46205A-U	46255A-U	46257A-U	-	-	-
83085	83105	83105	83105	83115	83125	83145	-	-	-

Anderson  
Barron Bethea  
Bethea/National  
Gould Inc. (ITE)  
Joslyn  
(Brewer-Titchener)  
Knox  
Lapp  
Locke  
Ohio Brass

ACSR with Straight or Formed Armor Rods

AWG	1/0 & 2/0	3/0 & 4/0	266.8	336.4	477	556.5	795	954

Aluminum Alloy Clamps

HAS-85-S	HAS-104-S	HAS-104-S	HAS-118-S	HAS-139-S	HAS-147-S	HAS-182-S	HAS-182-S
LS-1-S	LS-2-S	LS-3-S	LS-4-S	LS-6-S	-	-	-
CRSC-1S	CRSC-2S	CRSC-2S	CRSC-3S	-	-	-	-
9503-U	9504-U	9504-U	9505-U	9506-U	-	-	-
9503-S	9504-S	9504-S	9505-S	9506-S	-	-	-
9503-U	9504-U	9504-U	9505-U	9506-U	-	-	-
51453	51456	51456	51459	51465	-	-	-
87085	87105	87105	87115	87135	-	-	-
-	ACS	ACS	ACS	ACS	-	-	-

Anderson  
Bethea/National  
C & R  
Gould Inc. (ITE)  
Joslyn  
(Brewer-Titchener)  
Knox  
Lapp  
Ohio Brass  
\*Preformed

\*Cleviss type available.

ej  
October 1978

ej - Clamps, deadend with socket eye

AWG	ACSR			
	kcmil			
2/0 to 4/0	266.8	366.4	477	556.5

Iron or Steel Clamps (Require armor tape or liner)

Gould Inc. (ITE)	5001	5002	5002	5003
Joslyn				
(Brewer-Titchener)	5001	5002	5002	5003
Knox	5001	5002-B	5002-B	5003
Lapp	11501	11502	11502	11503
Locke	45001	45002	45002	45003
Ohio Brass	80440	80445	80445	80450

Aluminum Alloy Clamps (Do not require armor tape or liner)

Anderson	SD-57-S	SD-70-S	SD-86-S	SD-86-S	SD-98-S
Bethea/National	ADE-21-S	ADE-22-S	ADE-23-S	ADE-24-S	
C & R	CR-10-60S	CR-20-60S	CR-20-60S	-	
Gould Inc. (ITE)	52001	52011	52021	52031	
Joslyn					
(Brewer-Titchener)	5200	5201	5202	5203	
Knox	5200	5201	5202	5203	
Lapp	51530	51533	51536	51536	
Ohio Brass	86536	86540	86546	86546	

NOTE: When used with clevis-type insulators for large conductors on distribution lines, order clamp with clevis eye.



sb - Switch, disconnect (single-pole, hook-operated station class)

NEMA standard switches for station or line  
structure use where single-pole switching is permissible

<u>Manufacturer</u>	<u>Type</u>	<u>Voltage Ratings</u>	<u>System Voltages Line-to-Line</u>
Bridges	EH	15 thru 69 kV	12.5 thru 69 kV
	EHL(L)	15 thru 69 kV	12.5 thru 69 kV
	HA	15 thru 69 kV	12.5 thru 69 kV
Hi-Voltage (Joslyn)	HU	15 thru 69 kV	12.5 thru 69 kV
	HI	15 thru 69 kV	12.5 thru 69 kV
H. K. Porter (Delta-Star)	B-2M	15 thru 69 kV	12.5 thru 69 kV
	EV(PL)	15 thru 34.5 kV	12.5 thru 34.5 kV
<u>Gould Inc.</u> (ITE)	HPL	15 thru 69 kV	12.5 thru 69 kV
	DS(PL)	15 and 23 kV	12.5, 13.2, 24.9 kV
Johnson	HPT	15 thru 69 kV	12.5 thru 69 kV
Kearney	M-72(PL)	15 thru 69 kV	12.5 thru 69 kV
McGraw-Edison	D2(PL)	15 and 23 kV	12.5, 13.2, 24.9 kV
MEMCO	STV	15 thru 69 kV	12.5 thru 69 kV
	STU	15 thru 69 kV	12.5 thru 69 kV
Morgan	DHS	15 thru 69 kV	12.5 thru 69 kV
	(PL included in 15 kV)		
ANIXTER Royal	BT	15 thru 69 kV	12.5 thru 69 kV
'S & C	LBD(PL)	15 thru 34.5 kV	12.5 thru 34.5 kV
	Alduti(L)	15 and 25 kV	12.5 thru 24.9 kV
Siemens-Allis	HA	15 thru 69 kV	12.5 thru 69 kV

(L) Means solid material load interrupters are available and accepted.

(LV) Means vacuum interrupters are available and accepted.

(PL) Means hooks for portable load interrupters are available.

sb-2  
July 1978

sb - Switch, disconnect (single-pole, hook-operated station class)

NEMA standard switches for station or line  
structure use where single-pole switching is permissible

<u>Manufacturer</u>	<u>Type</u>	<u>Voltage Ratings</u>	<u>System Voltages Line-to-Line</u>
Southern States	PBO	15 thru 69 kV	12.5 thru 69 kV
	*PBN	15 thru 23 kV	12.5, 13.2, 24.9 kV
USCO	HH(PL)	15 thru 69 kV	12.5 thru 69 kV
	HD-66(PL)	15 thru 34.5 kV	12.5 thru 34.5 kV

(L) Means solid material load interrupters are available and accepted.

(LV) Means vacuum interrupters are available and accepted.

(PL) Means hooks for portable load interrupters are available.

\* With steel base only.

sb - Switch, disconnect (single-pole, hook-operated  
distribution class)\*

For distribution line use where power class insulation is not required  
and single-phase switching is permissible.

(Not suitable for substation use)

<u>Manufacturer</u>	<u>Type</u>	<u>Voltage Rating</u>	<u>System Voltage Line-to-Line</u>
ANIXTER Royal	BLT(PL)	15 and 23 kV	12.5, 13.2, 24.9 kV
Chance	M3(PL)	15 kV	12.5, 13.2 kV
Gould Inc. (ITE)	DS(PL)	15 and 23 kV	12.5, 13.2, 24.9 kV
Kearney	D-73(PL)	15 and 23 kV	12.5, 13.2, 24.9 kV
McGraw-Edison	D2(PL)	15 and 25 kV	12.5, 13.2, 24.9 kV
Morgan	DHS (PL included in 15 kV)	15 and 23 kV	12.5, 13.2, 24.9 kV
H. K. Porter	EV(PL)	15 kV	12.5 kV
S & C	LBD(PL)	15 and 25 kV	12.5, 13.2, 24.9 kV
Southern States	PD-2	15 and 23 kV	12.5, 13.2, 24.9 kV
	PDJ-2(PL)	15 and 23 kV	12.5, 13.2, 24.9 kV
USCO	HD-H2I(PL)	15 and 27 kV	12.5, 13.2, 24.9 kV

NOTE: Switches on this page must be furnished with four bolts for  
double crossarm mounting.

(L) Means solid material load interrupters are available and accepted.

(PL) Means hooks for portable load interrupters are available.

(LV) Means vacuum interrupters are available and accepted.

\* Steel bases only.

sc-1  
July 1978

sc - Regulators, voltage  
7.2/12.5 kV  
7.62/13.2 kV

Applicable Specification: REA "Specification for Substation Regulators," S-2

<u>Type</u>	<u>Size</u>	<u>Description</u>
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General Electric

ML-32	19.1 - 509 kVA	(SL) Single phase - step type
MLT	500 - 1000 kVA	(S) Three phase - step type
VML-32	500 - 833 kVA	(S) Single phase - vacuum step type
VMLT-32	1200 - 2800 kVA	(S) Three phase - vacuum step type

McGraw-Edison

RSAA	19.1 - 500 kVA	(SL) Single phase - step type
RAB	50 amp.	(L) Single phase - step type (Auto-Booster)

Westinghouse

UTS, UTT	167 - 1000 kVA	(S) Three phase - step type
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Siemens-Allis

JFR	38.1 - 416.3 kVA	(SL) Single phase - step type
LFR	50 amp.	(L) Single phase - step type

(L) Indicates line use

(S) Indicates substation use

zz - Poles

Applicable preservatives: Creosote, pentachlorophenol-petroleum and waterborne salts (ACA and CCA)

(Firms listed on pages zz-1 through zz-7 are also qualified to treat crossarms. Crossarms should be fabricated at one of the plants listed on page g-1 or g-2.)

Pressure Treatment

	<u>Insured Warranted</u>	<u>Independently Inspected</u>
Alabama Wood Treating Corp.	-	Mobile, Ala.
American Creosote Works, Inc.	-	Jackson, Tenn. Louisville, Miss. Pensacola, Fla.
American Crossarm & Conduit Co.	-	Chehalis, Wash.
Arkwood	-	Omaha, Arkansas
Atlantic Creosoting Co.	-	Portsmouth, Va. Savannah, Ga. Vidalia, Ga.
Baldwin Pole & Piling Co.	-	Bay Minette, Ala.
J. H. Baxter & Co.	-	Eugene, Ore. Long Beach, Calif. The Dalles, Ore. Quendall, Wash. Weed, Calif. Laramie, Wyo.
Benton Creosoting Co. (Kennedy Saw Mills)	-	Benton, La.
Broderick Wood Products Co.	-	Denver, Colo.
Brown Wood Preserving Co.	-	Brownville, Ala. Louisville, Ky.
Cascade Pole Co.	-	Tacoma, Wash. Olympia, Wash.



zz-2  
October 1978

zz - Poles

Pressure Treatment

	<u>Insured Warranted</u>	<u>Independently Inspected</u>
Cowboy Timber Treating, Inc.	-	Manderson, Wyo.
Colfax Creosoting Co.	-	Pineville, La.
Conroe Creosoting Co.	-	Conroe, Texas
Crown Zellerbach Corp.	-	Gulfport, Miss. Mobile, Ala. Urania, La. Sallisaw, Okla.
Dant & Russell, Inc.	-	North Plains, Ore.
Davis Timber Company, Inc.	-	Hattiesburg, Miss.
Dickson Treating Co.	-	Canton, Miss. Winnfield, La.
Dierks Div., Weyerhaeuser Co.	-	DeQueen, Ark.
El Dorado Pole & Piling Co., Inc.	-	El Dorado, Ark.
Eppinger and Russell	-	Chesapeake, Va.
Escambia Treating Co.	-	Brunswick, Ga. Pensacola, Fla. Camilla, Ga.
Fernwood Industries	-	Fernwood, Miss.
Fordyce Wood Preservers, Inc.	-	Fordyce, Ark.
Garland Creosoting Company	-	Longview, Texas
Hart Creosoting Company	-	Jasper, Texas
Edward Hines Lumber Company	-	Mena, Arkansas
Hoosier Treating Company	Gosport, Ind.	Gosport, Ind.
Huxford Pole & Timber Co., Inc.	-	Huxford, Ala.



U fw  
July 1978

U fw - Secondary Tap Connector

Manufacturer

Type or Catalog No.

Fargo

GUR-75 (10 amp max. load)  
GUR-750 (10 amp max. load)

U fz-1  
October 1978

U fz - Transformer Connector Block, Insulated

Multiple Cable Connectors

<u>Manufacturer</u>	<u>Connection Type</u>	<u>Catalog Number</u>
Alcoa	Lug	Interchange I ABBD Series (Disconnectable) Use with A9 insulating boots
Alcon	Set Screw	VBTT Series with double sealing sleeve
Burndy	Lug	Stud Mole
Electrical Spec. Prod.	Lug	Type SU (Permanent)
	Lug	Types SUR and RDSR (Removable) (With Types LA and AL lugs and sleeve kits)
	Set Screw	Type SUB (Permanent)
	Set Screw	Type SUBR (Removable) (Use with sleeves)
Fargo	Bolted	GUC Series
	Set screw	GUS-200S Series
Homac	Lug	FT-95 Series with flood seal sleeve kit
	Lug	FTU 125 Series (Disconnectable) with flood seal sleeve kit
	Set Screw	UT-R Series
ITT Blackburn	Lug	SCU, with lugs and sleeves
Penn Union	Lug	Type DBAT (Permanent)
	Lug	Type DBAT-LH (Disconnectable) Use with Series DBTB, DBTBF and DBTH lug and sleeve kits
Reliable	Set Screw	15956 (Permanent) and 15912-REA (Disconnectable)
Utilco	Set Screw	PTF-IN

NOTE: Additional insulation may be required with some of the above-listed secondary terminal blocks due to the irregularity of mating surfaces between various secondary studs being supplied by the transformer manufacturers.

U fz-2  
July 1978

U fz - Transformer Connector Block, Insulated

Single Cable Connectors

Manufacturer

Catalog Number

Electrical Spec. Prod

Type SM transformer bushing  
connector kit. (Stud to  
aluminum cables through  
350 kcmil)

NOTE: Additional insulation may be required with some of the above-listed secondary terminal blocks due to the irregularity of mating surfaces between various secondary studs being supplied by the transformer manufacturers.

U gc  
October 1978

U gc - Shield, cable riser

<u>Manufacturer</u>	<u>Dia. (Inches)</u>	<u>Length (Feet)</u>
<u>Galvanized Steel</u>		
Chance	2 - 3- $3\frac{1}{2}$	5 - 9
*Electrical Materials	2 - 3 - 4 - 5	5
*#Fargo	$2\frac{1}{4}$ - $3\frac{1}{4}$ - 3-3/4	5 - 8
	5	3 - 5
*Joslyn	2 - 3 - $3\frac{1}{2}$	5 - 8
*McGraw-Edison	2 - 3 - 4	3 - 5 - 10
Midland-Ross (Kindorf Snapduct)	$2\frac{1}{2}$ - $3\frac{1}{2}$ - 5 (14 ga. galv. steel)	$2\frac{1}{2}$ - 5 - 10

Plastic and Fiberglass

*Carlton (plastic)	2 - 3 - 4 - 5	10
*Electrical Materials (plastic)	2 - 3 - 4 - 5	5 - 10
*Hercules (Haskon) (plastic) (Power Mold I, II, III)	2 - 3 - 4 - 5	5 - $9\frac{1}{2}$ - 10
*Joslyn (plastic)	2 - 3 - 4 - 5	5 - 10
*Nordic (fiberglass)	$2\frac{1}{2}$ - $3\frac{1}{2}$ - $5\frac{1}{2}$	5 - 10

(Order by size and length)

#All sizes available with galvanized finish or painted green over galvanizing.

\*All sizes available with backing plate.

U gn - Enclosures, equipment

Sectionalizing Enclosures

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Malton Electric</u>		
MEJ Series	1045(7/11/74)	To obtain experience.
ME Series	1108(2/17/77)	
	1130(1/5/78)	
<u>Vertex Plastics</u>		
1826B, 1Ø	1045	To obtain experience.
1826C, 1Ø	7/11/74	
1881, 3Ø	1110(3/17/77)	
<u>Gerard</u>		
Mod-Brk		
6-115-000	1047	To obtain experience.
6-125-000	8/8/74	
6-315-010		
6-115 Series***		
6-125 Series***		
<u>Inter-Alloys</u>		
15 kV and 25 kV	1051(10/10/74)	To obtain experience.
Primary terminal pedestals	1133	
PP Series, 1Ø and 3Ø	2/16/78	
*PP-PM Series, 1Ø and 3Ø		
<u>Fargo</u>		
15 kV and 25 kV	1068(6/26/75)	To obtain experience.
UP-400	1074(9/25/75)	
<u>Galva-Closure Products</u>		
Series AG	1132	To obtain experience.
Series BB	2/2/78	
<u>Hoffman</u>		
U-J Series junction enclosures	1135	To obtain experience.
	3/23/78	
U-JGS Series ground sleeves	1147	
	9/14/78	

\*For pole mounting

\*\*For crossarm mounting

\*\*\*Available with surge arresters

Conditional List

U gn(4)

July 1978

U gn - Enclosures, equipment

Burial Type

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Sonoco Products Co.</u> 36" Duropipe (fiber) transformer vault. Available with stainless steel clevises, angle or tab ring, protective shields and cast iron or welded steel grates.	836 3/10/66	To obtain experience.



U go  
July 1978

U go - Fault Indicator  
(For Construction Unit UM6-4)

<u>Manufacturer</u>	<u>Type</u>
Burndy	Series 18 and 18F (To be used on single-phase circuits only)
Dossert	FLO-40
Edison Control Corp.	Series EC-100
Fisher Pierce	Series 1514 (To be used on single-phase circuits only)
McGraw-Edison	Linam

U gp  
October 1978

U gp - Connector blocks and splices, secondary

Watertight - for use in all locations

Manufacturer	Connection Type	Catalog Number
Alcoa	Lug	Interchange-I ABB Series Use with A-9 insulating boots
Alcon	Set screw	VPB Series
Blackburn	Lug	Series UP (With lugs and sleeves)
Burndy	Lug	URD Mole
Electrical Spec. Prod.	Lug	Type UC (8 AWG - 500 kcmil) (With LA lug and sleeve)
	Set Screw	Type UB (With sleeve) Splice Type ACL-HSH ( 6 AWG - 500 kcmil)
Fargo	Bolted	GU-115A (Pancake)
	Bolted	GU-215A Series
	Set screw	GU-500 Series
Homac	Lug	FS-95 Series with flood seal sleeve kit (8 AWG - 350 kcmil)
	Lug	FS 125 Series with flood seal sleeve kit (350 - 500 kcmil)
	Set Screw	UH-R Series
Kearney	Compression	HCR
	Compression	HAR
3M	Set Screw	MSC Series (8112-8115)
Penn Union	Lug	DBA Series with DBTB, DBTBF and DBTH Series lug and sleeve kits
Reliable	Set Screw	15903-15908, 15910 with sleeve kit
Utilco	Set Screw	Safety Sub Splice - USPA-350SS

Non-Watertight - for use in above-grade pedestals only

Fargo	Set screw	GUS-200 Series
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U gq  
July 1978

U gq - Boot or sleeve, insulated\*

Manufacturer

Catalog Number

ITT Blackburn

MPC9  
MPC15

Electrical Materials

100-B (for pad-mounted  
transformer spade terminals)

\*Use restricted to 120/208 volt 500 kVA transformers and larger not  
equipped with threaded studs.

U gu  
October 1978

U gu - Pedestal, power

Refer to Construction Drawings UK5 and UM5-5

Applicable Specifications: "REA Specifications for Secondary Power Pedestals," U-6

<u>Manufacturer</u>	<u>Inside Dimensions</u> <u>Inches</u>	<u>Height</u> <u>Inches</u>	<u>Catalog No.</u>
Fargo	8 x 8	38	UP-1520
	8 x 8	46	UP-1620
	10 $\frac{1}{2}$ x 10 $\frac{1}{2}$	26	UP-2320
	16 $\frac{1}{2}$ x 10 $\frac{1}{2}$	36	UP-2520
	10 $\frac{1}{2}$ x 10 $\frac{1}{2}$	42	UP-2350
Inter-Alloys	7.75 x 11	24	C-24128-PH
	7.75 x 15	24	C-24168-PH
	7.75 x 11.5	24	**PM-24128-PH
	7.75 x 15.5	24	**PM-24168-PH
Nordic	8 x 8	44	PR-50, PR-55
	9 x 14	30	PR-149 (stake) PR-150 (stakeless)
Vertex	8 x 14	30	SP 814
Western Power	8 x 8	30	*SP-8, DF-3 (dead-front)
	9 x 9	30	*SP-9-DF-3
	9 x 9	30	SPM-90, DF-3 (stakeless)
	9 x 14	30	*SP-14-DF-3
	9 x 14	30	SPM-140, DF-3 (stakeless)

\*Furnished with 48" stake

\*\*Pole mounted

U gv  
October 1978

U gv - Stake, power pedestal  
Refer to Construction Drawing UK5

<u>Manufacturer</u>	<u>Length Inches</u>	<u>Catalog No.</u>	
		<u>For power pedestal only</u>	<u>For joint pedestal</u>
Fargo	72-78-84	UP-5300G-S Series	UP-530G-J Series
Nordic	48-60-72	PM Series	

## Conditional List

U hb(1)

July 1978

## U hb - Cable Accessories

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Blackburn, ITT</u>		
15 kV, used with		To obtain experience.
loadbreak connectors		
Type LB2BA bushing plug		
Type ABOC protective cap	1012 (3/15/73)	
Type JLB2BA bushing plug		
25 kV, used with non-	1042 (5/30/74)	
loadbreak connectors		
Type LB2CA bushing plug	1110 (3/17/77)	
Type ABOCC protective cap		
<u>Burndy</u>		
15 kV, used with	1019	To obtain experience.
loadbreak connectors	6/21/73	
Type LBP82 bushing plug		
Type LBPC82-11 insulating cap		
<u>Elastimold (ESNA)</u>		
15 kV, used with		
loadbreak connectors		
Style 1601-CL cable lead	921 (6/26/69)	To obtain experience.
Style 1601-A2 bushing plug	" "	
Style 1601-A3 bushing plug*	1068 (6/26/75)	
Style 160-DR insulating cap	924 (8/7/69)	
15 kV, used with non-loadbreak		
connectors	921	
Style 1501-A1 bushing plug	6/26/69	
Style 150-DP deadend plug	842	
Style 150-DR deadend receptacle	6/2/66	
25 kV, used with loadbreak		
connectors	964	
Style 2701-A1 bushing plug*	4/8/71	
25 kV, used with non-loadbreak		
connectors	921	
Style K-1501-A1 bushing plug	6/25/69	
Style K-150-DR deadend receptacle	945	
	6/11/70	

\*Note: Asterisk indicates single or three phase. Other bushing plugs for use  
with loadbreak connectors are single phase only.



## U hb - Cable Accessories

(When ordering specify conductor size, type, whether copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>General Electric</u>		
15 kV, used with loadbreak connectors		To obtain experience.
Switch module 9U02AAA001	930(10/30/69)	
Switch module 9U02AAB001*	1133(2/16/78)	
Basic connector module 9U05 Series	930(10/30/69)	
25 kV, used with loadbreak connector		
Switch module 9U02BAA001	1016(5/10/73)	
Switch module 9U02BAB001*	1133(2/16/78)	
Insulating cap 9U01BEB001	1016(5/10/73)	
<u>RTE</u>		
15 kV, used with loadbreak connectors		To obtain experience.
No. 2603711A12 protective cap	1033(1/17/74)	
No. 2604797B01 bushing well insert*	1126 11/3/77	
No. 2625194A01 two-way bushing well insert*		
No. 2604231B01 bushing well plug		
25 kV, used with loadbreak connectors		
No. 2606591A02 protective cap	1033(1/17/74)	
No. 2604982B01M bushing well insert*	1148 9/28/78	
No. 2604975B01M two-way bushing well insert*		
35 kV, used with loadbreak connectors		
No. 2606630A01 protective cap	1048(8/22/74)	

\*NOTE: Asterisk indicates single or three phase. Other bushing plugs for use with loadbreak connectors are single phase only.

Conditional List  
U hb(2.1)  
October 1978

U hb - Cable Accessories

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Joy</u> 15 kV, used with loadbreak connectors Protective cap - X8946-231 Fast close bushing plug	1090(5/13/76) 1000(9/14/72)	To obtain experience.
25 kV, used with loadbreak connectors Protective cap - X8975-12	1090(5/13/76)	
<u>Kearney</u> 25 kV, used with loadbreak connectors No. 112500 bushing plug*	966 5/6/71	To obtain experience.
<u>Reliable</u> Concentric neutral bonding clamp (Nos. 2329 & 2330)	1037 3/21/74	1. To obtain experience. 2. Only for bonding of anodes or other metals to the neutrals of existing cable installations. 3. Not to be used to connect neutral to grounding electrodes.
<u>Harco</u> URD cable clamp	1114 5/12/77	Same as above

\*NOTE: Asterisk indicates single or three phase. Other bushing plugs  
for use with loadbreak connectors are single phase only.

U hp - Terminations, Elbow\*

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Burndy</u>		
15 kV, Loadbreak		
LBT 112 (without test point)	1144	To obtain experience.
LBT 112-T (with test point)	8/3/78	
15 kV, Fused	969	
SPF-TPK	6/17/71	
25 kV, Non-loadbreak	1145	
LBT 252 (without test point)	8/17/78	
LBT 252-T (with test point)		
<u>Elastimold (ESNA)</u>		
15 kV	945	To obtain experience.
Style 154-LR (non-loadbreak with voltage test point)	6/11/70	
Style 163-LR (Loadbreak without voltage test point)		
Style 164-LR (Loadbreak with voltage test point)		
25 kV	945	
Style K-154-LR (non-loadbreak with voltage test point)	6/11/70	
Style 271-LR (Loadbreak without voltage test point)	1068	
Style 272-LR (Loadbreak with voltage test point)	6/26/75	
35 kV		
Style 354-LR (non-loadbreak with voltage test point)	1064	
	5/1/75	

\*NOTE: Non-loadbreak devices require that connections be made in non-energized conditions only.

For application of loadbreak elbows on three-phase systems, refer to  
REA Bulletin 61-15 dated June 1974.

## Conditional List

U hp(2)

July 1978

## U hp - Terminations, Elbow\*

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>General Electric</u>		
15 kV, Loadbreak	930	To obtain experience.
Elbow connector module	10/30/69	
9U01 Series		
25 kV	1016	
9U01BAA Series (Loadbreak with voltage test point)	5/10/73	
9U01BBA Series (Loadbreak without voltage test point)		
<u>ITT Blackburn</u>		
15 kV, Loadbreak	981(12/16/71)	To obtain experience.
T2B & JT2B (without test point)	1054 11/27/74	
T2BT (with test point)	981(12/16/71)	
15 kV, Non-loadbreak	1037	
TN2BT (with test point)	3/21/74	
25 kV, Non-loadbreak		
T2CT (with test point)		
TN2CT (with test point)		
<u>Joy</u>		
15 kV, Loadbreak with voltage test point	1000 9/14/73	To obtain experience.
Break safe terminator		
25 kV Loadbreak		
X8975 Series (with test point)	1091	
C8975 Series (without test point)	5/27/76	

\*NOTE: Non-loadbreak devices require that connections be made in non-energized conditions only.

For application of loadbreak elbows on three-phase systems, refer to  
REA Bulletin 61-15 dated June 1974.



## U hp - Terminations, Elbow\*

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Kearney</u>		
15 kV		
1115-FC Series (Loadbreak with voltage test point)	1077 11/13/75	To obtain experience.
25 kV		
1125 Series - L1 (Loadbreak without voltage test point)	1001 9/28/72	
1125 Series - L2 (Loadbreak with voltage test point)	966 5/6/71	
<u>RTE</u>		
15 kV Loadbreak SBT IV	1122	To obtain experience.
2604000B Series with test point	9/8/77	
2603999B Series without test point		
15 kV Non-loadbreak	1148	
2625166B Series	9/28/78	
2625175B Series		
2525175B Series		
25 kV Loadbreak SBT	1032	
2604381B Series with test point	12/20/73	
2604400B Series without test point		
35 kV Loadbreak SBT	1048	
2603922B Series with test point	8/22/74	
2604006B Series without test point		

\*NOTE: Non-loadbreak devices require that connections be made in non-energized conditions only.

For application of loadbreak elbows on three-phase systems,  
refer to REA Bulletin 61-15 dated June 1974.

Conditional List

U hp(4)

October 1978

U hp - Terminations, Elbow  
(Rated for switching on three-phase systems)

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Kearney</u>		
15 kV, Loadbreak with	1005	To obtain experience.
voltage test point	12/7/72	
1115-FC Series	1077	
	11/13/75	
<u>RTE</u>		
15 kV, Loadbreak SBT IV	1032	To obtain experience.
2604600B Series with test	12/20/73	
point		
2604599B Series without	1122	
test point	9/8/77	
25 kV, Loadbreak SBT	1148	
2604740B Series with test	9/28/78	
point		
2604741B Series without		
test point		
<u>Elastimold (ESNA)</u>		
15 kV, Loadbreak without	1068	To obtain experience.
voltage test point	6/26/75	
Style 165-LR		
15 kV, Loadbreak with		
voltage test point		
Style 166-LR		
25 kV, Loadbreak without		
voltage test point		
Style 271-LR		
25 kV, Loadbreak with		
voltage test point		
Style 272-LR		
<u>General Electric</u>		
15 kV, Loadbreak		
9U01A--4-- Series	1133	To obtain experience.
25 kV, Loadbreak	2/16/78	
9U01B--5-- Series		



U hq - Terminations, Multipoint

Use with Loadbreak Connectors

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Elastimold (ESNA)</u>		
Cable tap	921	To obtain experience.
1601-CT	6/26/69	
Single Cable Tap		
1601-SCT		
15 kV		
2-way bushing, 163J2*	1068 (6/26/75)	
3-way bushing, 163J3*	1068 (6/26/75)	
3-way bushing, 1601-J3	921 (6/26/69)	
4-way bushing, 163J4*	1068 (6/26/75)	
4-way bushing, 1601-J4	945 (6/11/70)	
<u>RTE</u>		
LBC-2, 2-way bushing, 15 kV	924	To obtain experience.
2600730C04 - single phase	8/7/66	
2604883B01 - three phase		
LBC-3, 3-way bushing, 15 kV	1126	
2600730C08 - single phase	11/3/77	
2604883B02 - three phase		
LBC-4, 4-way bushing, 15 kV		
2600730C12 - single phase		
2604883B03 - three phase		
LBC-2, 2-way bushing, 25 kV	1148	
2604954B01 - three phase	9/28/78	
LBC-3, 3-way bushing, 25 kV		
2604954B02 - three phase		
LBC-4, 4-way bushing, 25 kV		
260495B03 - three phase		
<u>General Electric</u>		
15 kV		
2-way bushing 9U07ADB210	1131	To obtain experience.
3-way bushing 9U07AEB310	1/19/78	
4-way bushing 9U07AEB410		
25 kV	1016	
2-way bushing 9U07BDB210	5/10/73	
3-way bushing 9U07BEB310		
4-way bushing 9U07BEB410		
<u>ITT Blackburn</u>		
J2BA (2, 3, 4-way) 15 kV	1110	To obtain experience.
JJ2BA* (2, 3, 4-way) 15 kV	3/17/77	

\*NOTE: Asterisk indicates single or three phase. Other terminations for  
use with loadbreak connectors are single phase only.

Conditional List

U hq(3)

July 1978

U hq - Terminations, Multipoint

Use With Non-loadbreak Connectors

(When ordering specify conductor size, type, whether  
copper or aluminum and insulation diameter)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Elastimold (ESNA)</u>		
Style 150-T, T-Tap (15 kV)	873 7/27/67	To obtain experience.
Style K-150-T, T-Tap (25 kV)	921 6/26/69	
<u>ITT Blackburn</u>		
J2CA (2, 3, 4-way) 25 kV	1110 3/17/77	To obtain experience.
<u>RTE</u>		
VBJ-2, 2-way bushing, 15 kV, 2604670B01	1126 11/3/77	To obtain experience.
VBJ-3, 3-way bushing, 15 kV, 2604670B02		
VBJ-4, 4-way bushing, 15 kV, 2604670B03		

U hv - Cable, underground

600 volt multi-conductor cable

Applicable Specification: REA Specification U-2

Conductor : Copper, #4 AWG and larger

Insulation : Aluminum, #2 AWG and larger

: Cross-linked polyethylene (XLPE)

Manufacturer	Type Insulation	Type Conductor	Cable Configuration
Alcan	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Alcoa	XLPE	Aluminum	3 insulated conductors triplexed
American Electrical	XLPE	Aluminum	3 insulated conductors triplexed
Anaconda	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Cyprus (Rome)	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Essex (Paranite)	XLPE	Copper or Aluminum	3 insulated conductors triplexed
General Electric	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Hatfield	XLPE	Copper	3 insulated conductors triplexed
Kaiser	XLPE	Aluminum	3 insulated conductors triplexed
Okonite	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Pirelli	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Reynolds	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Southwire	XLPE	Copper or Aluminum	3 insulated conductors triplexed
Triangle	XLPE	Copper or Aluminum	3 insulated conductors triplexed

NOTE: The above cable may be supplied with UL label for Type USE.

Conditional List  
U hv(1)  
October 1978

U hv - Cable, underground  
(15 or 25 kV cable)

TREE RESISTANT

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Reynolds</u> Reynotree HMW	1114 5/12/77 1134 3/2/78	To obtain experience.
<u>Alcoa</u> Treban 100 HMW DFDA-6202 HMW	1144(8/3/78) 1148(9/28/78)	To obtain experience.
<u>Cyprus</u> Treban 100 HMW	1146(8/31/78)	To obtain experience.
<u>Essex</u> Treban 100 HMW	1146(8/31/78)	To obtain experience
<u>Southwire</u> Treban 100 HMW	1146(8/31/78)	To obtain experience.
<u>Triangle</u> Treban 100 HMW	1146(8/31/78)	To obtain experience.

## U ja - Transformer Pad

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Carolina Dielectrics</u> Model 0502-1 Fiberglass Size: 40" x 44"	1000 9/14/72	To obtain experience.
<u>Chance</u> C107-0162 and C107-0171 Fiberglass Size: 40" x 44"	994 6/29/72	To obtain experience.
<u>Fiberglass Specialists</u> Molded polyethylene Size: approx. 41" x 41"	989 4/13/72	To obtain experience.
<u>Highline</u> HL-46B, Fiberglass Size: approx. 42" x 42"	989 4/13/72	To obtain experience.
<u>Plastic Structures</u> No. 40402012 Molded polyethylene Size: 40" x 40"	997 7/27/72	To obtain experience.
<u>Thermodynamics</u> Poly-Pad, PR Series* Molded polyethylene	998(8/17/72) & 1009(2/1/73)	To obtain experience.
<u>Sonoco Products</u> No. 6000383 Reinforced plastic Size: 43" x 48"	1068 6/26/75	To obtain experience.
<u>Carlton</u> Composolite - PH Series	1141 6/15/78	To obtain experience.
<u>Cyclo</u> Dwg. No. 730126-2 Molded polyethylene Size: 42" x 42"	1147 9/14/78	To obtain experience.

\*Order by catalog number and size.



Conditional List

U ja(2)

July 1978

U ja - Transformer Pad (Sleeve)

<u>Manufacturer</u>	<u>Meeting No. and Date</u>	<u>Conditions</u>
<u>Concast</u> Fibercrete modular bases	1125(10/21/77)	To obtain experience.
<u>Durham</u> UGS Series* Models A, B, C & D Steel box pad	1065 5/15/75	To obtain experience.
<u>Highline</u> Box pad HL-45A Size: L-43", W-34½", D-32"	1002 10/12/72	To obtain experience.

\*Order by catalog number and size.





